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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,128	08/28/2003	Tracey Jacksier	Serie 6332	5517
7590 10/25/2005			EXAMINER	
Linda K. Russell, Patent Counsel			LEE, KEVIN L	
Air Liquide			ART UNIT	
Suite 1800			PAPER NUMBER	
2700 Post Oak Blvd.			3753	
Houston, TX 77056			DATE MAILED: 10/25/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/650,128

Applicant(s)

JACKSIER ET AL.

Examiner

KEVIN L. LEE

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/9/04; 9/17/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, 11, 12, 14-21 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moskow (U.S. Patent No. 3,890,999). The patent to Moskow discloses a filter-less regulator comprising a housing including an inlet and outlet, a pressure regulating section to reduce the pressure of a fluid flowing between the inlet and outlet, the housing having internal surfaces formed of stainless steel; see col. 1, lines 38-42. It is inherent that flowing a reactive gas through the flow regulator will result in some absorption of the reactive gas. The amount of gas absorbed will be dependent upon the size of the surface area of the internal surfaces. It would have been an obvious design expedient to provide the flow regulator of Moskow with internal surfaces of such a size that a reactive gas has an inlet concentration no greater than about 10 ppm and that an outlet concentration does not decrease to a value that is less than 5-10% of the inlet concentration during an initial one hour period of use of the regulator or to have the combined area of the internal surfaces to be no greater than about 52-97 square centimeters.

Claims 1-7, 9-12, 14-20 and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ollivier (U.S. Patent No. 5,787,925). The patent to Ollivier discloses a filter-less regulator comprising a housing including an inlet and outlet, a pressure regulating section to reduce the pressure of a fluid flowing between the inlet and outlet, the housing having internal surfaces formed of stainless steel; see col. 5, lines 56-58. It is inherent that flowing a reactive gas through the flow regulator will result in some absorption of the reactive gas. The amount of gas absorbed will be dependent upon the size of the surface area of the internal surfaces. It would have been an obvious design expedient to provide the flow regulator of Ollivier with internal surfaces of such a size that a reactive gas has an inlet concentration no greater than about 10 ppm and that an outlet concentration does not decrease to a value that is less than 5-10% of the inlet concentration during an initial one hour period of use of the regulator or to have the combined area of the internal surfaces to be no greater than about 52-97 square centimeters.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Moskow or Ollivier in view of Jacksier et al (U.S. Patent No. 6,153,167). The patents to either Moskow or Ollivier lack regulating carbon monoxide. The patent to Jacksier et al teaches using a pressure regulator to regulate the flow of carbon monoxide, col. 1, lines 52-55. In view of the teaching of Jacksier et al, it would have been obvious to one of ordinary skill in the art at the time of the invention to regulate the flow of carbon monoxide through the regulators as an alternative fluid source.

Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patent to Dukas et al (U.S. Patent No. 6,003,545) is cited for the additional showing of a stainless-steel pressure regulator.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN L. LEE whose telephone number is (571) 272-4915. The examiner can normally be reached on MONDAY-THURSDAY.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, GENE MANCENE can be reached on (571) 272-4930. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SEPTEMBER 29, 2005


Kevin Lee
Primary Examiner